

### BEDES Commercial Sub-Group (C1) Notes on: First Conference Call—January 7, 2013 (1:00-3:30 EST)

Convener: Norm Bourassa, LBNL Facilitator: Dr. Jonathan Raab, Raab Associates, Ltd. (See attendees in Appendix I)

# 1:00 Welcome, Introductions, Ground rules, and Overview of BEDES Sub-Group Process (and today's agenda and goals)—Dr. Raab

- Jonathan went over the role of sub-groups and ground rules, and no one had any questions.
- Turned attention to Commercial Site and Facility spreadsheet provided by LBNL with fields coded by LBNL for discussion ("yes" discuss; "maybe" discuss if time; and "no" discussion not needed unless Sub-Group member brings up). Note names in () after each field name indicates LBNL team member presenting the field and associated discussion question. (See spreadsheet on website).

#### 1:15 BEDES Commercial: Site Section (Data Fields)

- Climate Zone (Andrea)
  - o Discussion:
    - Expand constrained list to include California and international climate zones
    - Could provide mapping between various zone types
    - Could select more than one climate zone category
    - Having zip code alone would suffice since all client software systems will lookup weather data using zip code and so there is no need for weather info beyond zip code and/or climate zone. ESPM also uses just zip code to derive additional weather info.
  - Resolution:
    - Add CA and Bonneville to list of climate zones (also look into availability of compatible international CZs);
    - Don't need weather data since zip code is already in BEDES—no one disagreed
- School District (Andrea)
  - Discussion:
    - This field is fine at the Site level
    - Could use the school district codes available instead of a free-form field
  - Resolution:
    - This field does not need to be moved. Change field name to School District ID and data type to constrained list of codes.
- Tax Floor Area (Andrea)

- Discussion:
  - Often you have only one or the other, tax floor area of the site or tax floor area of the facility
- Resolution:
  - Keep and rename to differentiate between tax floor area at the site vs. the facility level
- If Time:
  - Complex Type
    - Discussion:
      - Expand to include "Mixed Use Commercial" and "Mixed Use With Multifamily"
      - Need to keep complex type at the facility level because a complex can be made up of a single, master-metered facility. This is the only way to indicate that it is actually a multi-building complex.
    - Resolution:
      - Keep at Site level and add mixed-use types to the list.
      - [Note I the R1 Sub-Group also agreed to keep at site level but include types to accommodate: Neighborhood Association, Home Owner Association (HOA), and Cooperatives]
  - o Other?
    - Elevation, Latitude and Longitude
      - Discussion:
        - Could be derived from zip code too— which can avoid some data entry through automation
        - o But not consistent w/BEDES library approach.
        - Zip code does not deliver exact coordinates of building location (Typically the Post Office unless zip code plus 4 is used).
      - Resolution:
        - o Keep these fields in

#### 2:00 BEDES Commercial: Facility & Activity Area Sections (Data Fields)

- Primary Facility Type (Norm)
  - Resolution:
    - Change "-Other" and "-Uncategorized" to "-Other" and "-Unknown".
    - Move Nursing Home under Health Care
    - Consider using SIC or NEICS codes also or instead
- Surroundings (Shankar)
  - Discussion:
    - Expand to include "Attached from Above" "Attached from Below"
    - Change field name to "Abutment"
    - Consider a new field to describe the surrounding landscape environment, such as foliage and/or shading – There is a field called External Shading in the Envelope table that could be revisited to capture this information.

- Resolution:
  - Change field name to Abutment
  - Add "Attached from Above" and "Attached from Below" types
- Building Certification Type (Shankar)
  - o Discussion:
    - Expand to include: Energy Asset Score, Living Building, MBIA 100, Enterprise Green Communities, High Performance Schools, Washington State Sustainable Schools Protocol, CHPS, and an "Other:\_\_\_\_\_\_" to capture emerging certifications.
    - Need to differentiate between score/rating and certification, as a building could have an ESPM rating but not have received certification.
    - What about capturing certification version, as in LEED versions that become more and more stringent over time.
      - Could be addressed by having "Year Permitted" to capture code compliance year.
  - Resolution:
    - Include all suggested certification types (see above)
    - Add new field to capture just score, not rating
    - Add new "Permit Year" field to assist in capturing certification version
- Average Weekly Operating Hours (Andrea)
  - Discussion/Resolution:
    - Need to break-up into two fields, Operating Hours and Occupied Hours, with very careful attention to what constitutes a building to be in operation.
    - Additional granularity would be good, a daily schedule of hours would be helpful, but still keep the weekly average. No mention of capturing holiday hours, etc.
    - Also, linked to the schedule should be information regarding occupancy percentage or number (ex. Schools that only have a few classes on Saturdays)
- On-Site Cooking (Andrea—not issue here anymore—been deleted)
- If Time:
  - Complete Total Energy (Andrea)
    - Discussion/Resolution:
      - Ok at the facility level. Would be good to have more flags relating to gaps, unaligned data, etc.
  - Building Footprint Area & Gross Floor Area (Andrea)
    - Resolution:
      - Use ASHRAE's definition of gross floor area, as they've spent considerable effort coming to a consensus
      - Add field to capture Day-lit Floor Area, distinguish this from Lighted Floor Area
      - Align with BOMA standards for rentable and net floor area definitions
  - Heated Only, Cooled Only, and Heated and Cooled Floor Area (Andrea)
    - Resolution: No other fields needed
  - Number of Units (Norm—we need this skip)

- Connected Load (Andrea)
  - Discussion:
    - It's fine at the activity area but needs more discussion. What about peak load? Why not associate it with the systems, which should be associated with the activity area.
    - Reminder-- BEDES is not a schema, merely a definition standard.
  - Resolution:
    - No resolution, requires a larger discussion in TWG when systems are being worked on during Module 2
- Other?
  - Consider in TWG (During Module 2, when this will come up more often) if BEDES needs to define interrelationships between systems in the facility, ie.
    Wall linked to specific activity area.

#### 3:20 Wrap-Up and Next Steps

- Note on process suggestions from participants:
  - o Add line numbers corresponding to field from worksheet to agenda
  - Keep onscreen notes (of final resolution)

## Appendix I: Attendees

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